What is claimed:

1. A tissue grasping device comprising:

a tip portion including a first jaw and a second jaw, at least one of the jaws being movable toward the other jaw;

the first jaw including a first tissue grasping surface and the second jaw including a second tissue grasping surface, the tissue grasping surface of each jaw having a length defined by proximal and distal ends, a width defined by edges and further comprising an electrically insulative surface;

first and second electrodes being connectable to different terminals of a radio frequency generator to generate electrical current flow therebetween, the first electrode having a first electrode surface and the second electrode having a second electrode surface;

at least one fluid passage being connectable to a fluid source;

one of the first and second electrode surfaces being located on one or the other of the jaws separated from one edge of the tissue grasping surface and the other of the electrode surfaces being located on one or the other of the jaws separated from the other edge of the tissue grasping surface.

2. The tissue grasping device of claim 1 wherein:

the tip portion is configured to provide radio frequency power from a radio frequency generator with a fluid from the fluid source to tissue, the fluid provided to the tissue at a tissue surface and the radio frequency power provided to the tissue below the tissue surface.

3. The tissue grasping device of claim 1 wherein:

the tip portion is configured to provide radio frequency power to tissue at least partially through a fluid coupling located on a surface of the tissue, the fluid coupling comprising an electrically conductive fluid provided from the fluid source, the electrically conductive fluid provided from the tip portion with the radio frequency power.

4. The tissue grasping device of claim 1 further configured to:

receive radio frequency power from a radio frequency generator at a power level and an electrically conductive fluid from the fluid source at a fluid flow rate; and

deliver the electrically conductive fluid to tissue at a tissue surface and the radio frequency power to the tissue below the tissue surface.

5. The tissue grasping device of claim 1 further configured to:

receive radio frequency power from a radio frequency generator at a power level and an electrically conductive fluid from the fluid source at a fluid flow rate; and

deliver the electrically conductive fluid to tissue at a tissue surface and the radio frequency power to the tissue below the tissue surface at least partially through a fluid coupling comprising the electrically conductive fluid.

6. The tissue grasping device of any of claims 1-5 wherein:

the tissue grasping surface of at least one jaw comprises a hydrophobic surface.

7. The tissue grasping device of any of claims 1-6 wherein:

the tissue grasping surface of at least one jaw comprises a textured surface.

8. The tissue grasping device of any of claims 1-7 wherein:

the tissue grasping surface of at least one jaw comprises a surface roughness between about 10 and 500 microns.

9. The tissue grasping device of any of claims 1-8 wherein:

the tissue grasping surface of at least one jaw comprises one or more serrations.

10. The tissue grasping device of claims 1-9 wherein:

the tissue grasping surface of at least one jaw has a contact angle (θ) with a fluid provided thereon equal to or greater than about 30 degrees and the fluid is provided from the fluid source.

11. The tissue grasping device of any of claims 1-10 wherein:

at least a portion of one of the edges defining the width of the tissue grasping surface of at least one jaw comprises a beveled edge.

12. The tissue grasping device of any of claims 1-11 wherein:

the tissue grasping surface of at least one jaw comprises a material with a thermal conductivity at 300°K (Kelvin) equal or greater than about 0.01 watt/cm°K.

13. The tissue grasping device of claim 1 wherein:
the tissue grasping surface of at least one jaw is supported by a support structure; and
the tissue grasping surface of the at least one jaw is provided at least partially by a coating overlying the support structure.

14. The tissue grasping device of claim 1 wherein:
the tissue grasping surface of at least one jaw further comprises a medial portion, the medial portion supported therebeneath by a support structure comprising a material with a thermal conductivity at 300°K (Kelvin) equal or greater than about 0.01 watt/cm°K.

15. The tissue grasping device of claim 1 wherein:
the tissue grasping surface of at least one jaw further comprises a medial portion, the medial portion supported therebeneath by a support structure which provides a heat sink for transferring heat away from the tissue grasping surface.

16. The tissue grasping device of claim 1 wherein:
the tip portion further comprises at least one fluid outlet in fluid communication with the fluid passage configured to provide a fluid from the fluid source to tissue.

17. The tissue grasping device of claim 16 wherein:
the at least one fluid outlet in fluid communication with the fluid passage further comprises a first fluid outlet and a second fluid outlet;
the first fluid outlet being located on the same jaw as the first electrode; and
the second fluid outlet being located on the same jaw as the second electrode.

18. The tissue grasping device of claim 17 wherein:
the first fluid outlet and the second fluid outlet are configured to provide the fluid to tissue located outside of the tissue grasping surfaces.

19. The tissue grasping device of claim 17 wherein:
the first fluid outlet and the second fluid outlet are configured to provide the fluid to tissue located outside of and adjacent the tissue grasping surfaces.

20. The tissue grasping device of claim 17 wherein:

the first fluid outlet and the second fluid outlet are configured to provide the fluid to tissue located outside of and separated from the tissue grasping surfaces.

21. The tissue grasping device of claim 17 wherein:

the first fluid outlet is configured to provide the fluid to tissue located adjacent the first electrode surface; and

the second fluid outlet is configured to provide the fluid to tissue located adjacent the second electrode surface.

22. The tissue grasping device of claim 17 wherein:

the first fluid outlet is configured to provide the fluid between the first electrode surface and tissue; and

the second fluid outlet is configured to provide the fluid between the second electrode surface and tissue.

23. The tissue grasping device of claim 17 wherein:

the first fluid outlet is configured to provide the fluid between the first electrode surface and one edge of one or the other of the tissue grasping surfaces; and

the second fluid outlet is configured to provide the fluid between the second electrode surface and the other edge of one or the other of the tissue grasping surfaces.

24. The tissue grasping device of claim 17 wherein:

the first fluid outlet is configured to provide the fluid to the first electrode surface; and

the second fluid outlet is configured to provide the fluid to the second electrode surface.

25. The tissue grasping device of claim 17 wherein:

the first fluid outlet is configured to provide the fluid to a first portion of one or the other of the jaws outside the tissue grasping surface; and

the second fluid outlet is configured to provide the fluid to a second portion of one or the other of the jaws outside the tissue grasping surface.

26. The tissue grasping device of claim 16 wherein:

the at least one fluid outlet in fluid communication with the fluid passage further comprises a first plurality of fluid outlets and a second plurality of fluid outlets, the first plurality of fluid outlets being located on the same jaw as the first electrode and the second plurality of fluids outlet being located on the same jaw as the second electrode.

27. The tissue grasping device of claim 16 wherein:

the first electrode surface is configured for the fluid to form a film at least partially thereon; and

the second electrode surface is configured for the fluid to form a film at least partially thereon.

28. The tissue grasping device of claim 1 wherein:

the fluid passage forms into a first fluid passage and a second fluid passage;

the first fluid passage being located on the same jaw as the first electrode; and

the second fluid outlet being located on the same jaw as the second electrode.

29. The tissue grasping device of claim 28 wherein:

the first electrode forms at least a portion of the first fluid passage; and

the second electrode forms at least a portion of the second fluid passage.

30. The tissue grasping device of claim 28 wherein:

the first electrode and the second electrode are each provided by an elongated structure having a cavity therein;

the first fluid passage at least partially defined by the cavity of the first electrode structure; and

the second fluid passage at least partially defined by the cavity of the second electrode structure.

31. The tissue grasping device of claim 30 wherein:

the first electrode and the second electrode each comprise metal tubing.

32. The tissue grasping device of claim 1 wherein:

each of the first and second electrode surfaces is separated from the tissue grasping surface of the jaw to which it is located by a gap.

33. The tissue grasping device of claim 32 wherein:

at least a portion of each gap separating each of the first and second electrode surfaces from the tissue grasping surface of the jaw to which it is located is configured to receive a fluid from the fluid source.

34. The tissue grasping device of claim 33 wherein:

the fluid received by each of the gaps is configured to provide a fluid coupling which removes heat from tissue located outside the tissue grasping surfaces.

35. The tissue grasping device of claim 34 wherein:

the fluid comprises an electrically conductive fluid; and

the fluid received by each of the gaps is configured to provide a fluid coupling which enhances the electrical connection of the first and second electrode surfaces and tissue located outside the tissue grasping surfaces.

36. The tissue grasping device of claim 35 wherein:

at least a portion of the electrical current flow between the first and second electrode surfaces may be caused to flow at least partially through at least one fluid coupling as opposed to tissue located outside the tissue grasping surfaces, whereby the amount of current flow through tissue located outside the tissue grasping surfaces may be correspondingly reduced.

37. The tissue grasping device of claim 32 further comprising:

the tissue grasping surface of each jaw having a length; and

each gap further comprises an elongated gap separating each of the first and second electrode surfaces from the tissue grasping surface of the jaw to which it is located along the length of the tissue grasping surface.

38. The tissue grasping device of claim 37 wherein:

at least a portion of each elongated gap separating each of the first and second electrode surfaces from the tissue grasping surface of the jaw to which it is located is configured to receive a fluid from the fluid source and provide a fluid flow channel for the fluid along the length of the tissue grasping surface.

39. The tissue grasping device of claim 1 wherein:

at least one jaw comprises at least one stand-off configured to keep tissue from physically contacting at least one of the first electrode surface and the second electrode surface.

40. The tissue grasping device of claim 1 further comprising:

at least one jaw further comprises at least one obstruction configured to inhibit a fluid shunt from forming between the first electrode and the second electrode.

41. The tissue grasping device of claim 1 further comprising:

a tissue treatment indicator which provides an output related to the level of treatment of tissue.

42. The tissue grasping device of claim 41 wherein:

the tissue treatment indicator is located on the tip portion.

43. A tissue grasping device comprising:

a tip portion including a first jaw and a second jaw, at least one of the jaws being movable toward the other jaw;

each jaw including a tissue grasping surface, the tissue grasping surface of each jaw further comprising an electrically insulative surface;

a portion of each tissue grasping surface being located on each side of a center plane, the center plane orientated longitudinal and perpendicular to the tissue grasping surface;

first and second electrodes being connectable to different terminals of a radio frequency generator to generate electrical current flow therebetween, the first electrode having a first electrode surface and the second electrode having a second electrode surface;

at least one fluid passage being connectable to a fluid source;

one of the first and second electrodes being located on one or the other of the jaws on one side of the center plane and the other of the electrodes being located on one or the other of the jaws on the other side of the center plane; and

each of the first and second electrode surfaces being separated from the tissue grasping surface of the jaw to which it is located.

44. A tissue grasping device comprising:

a tip portion including a first jaw and a second jaw, at least one of the jaws being movable toward the other jaw;

each jaw including a tissue grasping surface, the tissue grasping surface of each jaw further comprising an electrically insulative surface;

a portion of each tissue grasping surface being located on two opposing sides of a cutting mechanism, the cutting mechanism comprising a blade;

first and second electrodes being connectable to different terminals of a radio frequency generator to generate electrical current flow therebetween, the first electrode having a first electrode surface and the second electrode having a second electrode surface;

at least one fluid passage being connectable to a fluid source;

one of the first and second electrodes being located on one or the other of the jaws on one side of the cutting mechanism and the other of the electrodes being located on one or the other of the jaws on the other side of the cutting mechanism; and

each the first and second electrode surfaces being separated from the tissue grasping surface of the jaw to which it is located.

45. A method for treating tissue comprising:

providing tissue;

providing electrical current;

providing a fluid;

providing a first tissue grasping surface and a second tissue grasping surface;

grasping a first portion of tissue, the first portion of tissue located between the tissue grasping surfaces;

providing the fluid to a second portion of tissue, the second portion of tissue located outside the tissue grasping surfaces;

providing the electric current to the tissue; and

directing the electric current in the first portion of tissue to flow across the tissue grasping surfaces.

46. The method for treating tissue of claim 45 comprising the additional step of:

cooling the second portion of tissue with the fluid.

47. The method for treating tissue of claim 45 wherein:
the step of providing a fluid further comprises providing an electrically conductive fluid, and the additional step of:
reducing the electrical current in the second portion of tissue with the fluid.

48. A method for treating tissue comprising:
providing tissue;
providing electrical current;
providing a fluid;
providing a first tissue grasping surface and a second tissue grasping surface;
grasping a first portion of tissue, the first portion of tissue located between the tissue grasping surfaces;
providing the fluid to a second portion of tissue, the second portion of tissue located outside the tissue grasping surfaces;
providing the electric current to the tissue; and
directing the electric current in the first portion of tissue to flow substantially parallel to the tissue grasping surfaces.

49. The method for treating tissue of claim 48 comprising the additional step of:
cooling the second portion of tissue with the fluid.

50. The method for treating tissue of claim 48 wherein:
the step of providing a fluid further comprises providing an electrically conductive fluid, and the additional step of:
reducing the electrical current in the second portion of tissue with the fluid.

51. The tissue grasping device of claim 1 further comprising:
at least one electrical transformer coupled to the first and second electrodes.

52. The tissue grasping device of claim 51 wherein:
the at least one electrical transformer comprises a voltage transformer.

53. The tissue grasping device of claim 51 wherein:
the at least one electrical transformer comprises an impedance transformer.

54. The tissue grasping device of claim 51 wherein:
the at least one electrical transformer comprises an autotransformer.

55. The tissue grasping device of claim 51 wherein:
the at least one electrical transformer comprises a single coil.

56. The tissue grasping device of claim 51 wherein:
the at least one electrical transformer comprises a first coil electrically insulated from a second coil.

57. The tissue grasping device of claim 51 wherein:
the at least one electrical transformer comprises a step-up transformer.

58. The tissue grasping device of claim 51 wherein:
the at least one electrical transformer further comprises a first transformer and a second transformer coupled in series to the first and second electrodes, the first transformer comprising an impedance transformer and the second transformer comprising an autotransformer.

59. An adaptor for electrically coupling between an electrosurgical generator and a bipolar electrosurgical device, the adaptor comprising:
a power input connector for coupling the adaptor with a monopolar mode power output connector of the electrosurgical generator;
a ground connector for coupling the adaptor with a ground connector of the electrosurgical generator;
a first and a second power output connector, each for coupling the adaptor with a first and a second bipolar mode power input connector of the bipolar electrosurgical device, respectively;
at least one electrical transformer coupled between the power input connector and the first and second power output connectors, the transformer comprising an autotransformer.

60. The adaptor of claim 59 further comprising:
a monopolar hand switch connector for coupling the adaptor with a monopolar mode hand switch connector of the electrosurgical generator; and
at least one bipolar mode hand switch connector for coupling the adaptor with a bipolar mode hand switch connector of the electrosurgical device.

61. The adaptor of claim 60 further comprising:

a first and a second bipolar mode hand switch connector for coupling the adaptor with a first and a second bipolar mode hand switch connector of the electrosurgical device, respectively.

62. The adaptor of claim 61 wherein:

the first bipolar mode hand switch connector is coupled to the monopolar hand switch connector; and

the second bipolar mode hand switch connector is coupled to the power input connector in parallel with the transformer, whereby the coupling bypasses the transformer.

63. An adaptor for electrically coupling between an electrosurgical generator and a bipolar electrosurgical device, the adaptor comprising:

a pair of bipolar power input connectors for coupling the adaptor with a pair of bipolar power output connectors of the electrosurgical generator;

a pair of bipolar power output connectors for coupling the adaptor with a pair of bipolar power input connectors of the bipolar electrosurgical device; and

at least one electrical transformer coupled between the bipolar power input connectors and the bipolar power output connectors.

64. The adaptor of claim 63 further comprising:

a first electrical transformer and a second electrical transformer coupled in series and between the power input connector and the first and second power output connectors, the first transformer comprising an impedance transformer and the second transformer comprising an autotransformer.

65. The adaptor of claim 63 further comprising:

a bipolar hand switch input connector for coupling the adaptor with a bipolar hand switch output connector of the electrosurgical generator; and

at least one bipolar mode hand switch output connector for coupling the adaptor with a bipolar mode hand switch input connector of the electrosurgical device.

66. The adaptor of claim 65 further comprising:

a first and a second bipolar mode hand switch output connector for coupling the adaptor with a first and a second bipolar mode hand switch input connector of the electrosurgical device, respectively.

67. The adaptor of claim 66 wherein:

the first bipolar mode hand switch output connector is coupled to the bipolar hand switch input connector; and

the second bipolar mode hand switch output connector is coupled to one of the bipolar power input connectors in parallel with the impedance transformer and the autotransformer, whereby the coupling bypasses the transformers.